

## REMARKS

I. Status of the Application

Claims 1-20 are pending in this application. In the October 7, 2005 office action, the Examiner:

A. Rejected claims 14 and 15 under 35 U.S.C. § 112, second paragraph as allegedly being indefinite;

B. Rejected claims 1-5, 7-9 and 11-14 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,940,009 to Loy et al. (hereinafter "Loy");

C. Rejected claims 17-20 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 5,488,565 to Kennon et al. (hereinafter "Kennon");

D. Deemed claims 6, 10 and 16 allowable if rewritten in independent format.

In this response, claims 1, 10, 11, 14 and 17 have been amended to further particularly point out and distinctly claim the inventive subject matter. Claim 9 has been canceled, without prejudice. New claim 21 has been added. Applicants respectfully traverse the rejections of claims 1-20 in view of the foregoing amendments and the following remarks.

II. The Indefiniteness Rejections of claims 14 and 15 are Moot

The Examiner rejected claims 14 and 15 as allegedly being indefinite. The Examiner correctly observed that the indefiniteness of claims 14 and 15 arose from an inadvertent error in which claim 14 inadvertently recited a dependence upon claim 1. As suggested by the Examiner, claim 14 has been amended to depend from claim 11, and not claim 1. As a consequence, the indefiniteness rejection of claims 14 and 15 are moot and should be withdrawn.

### III. Claim 1 is Not Anticipated

Claim 1 stands rejected as allegedly anticipated by Loy. Claim 1 has been amended to essentially incorporate the limitations of claim 9 as filed. Claim 9, however, also stands rejected as allegedly anticipated by Loy. As will be discussed below, Loy fails to disclose each and every element of claim 1 as amended.

#### A. The Present Invention

It appears from the October 7, 2004 office action that the Examiner comprehended the invention well for the most part. However, a brief summary is provided herebelow in any event.

Claim 1 is directed to an apparatus for determining tampering in an electricity meter arrangement. The arrangement includes a voltage sense circuit and a processing circuit. The voltage sense circuit is coupled to sense voltage on the first and second feeder lines, and is operable to generate a voltage detection signal based on a first voltage on the first feeder line and a second voltage on the second feeder line. The voltage detection signal has a characteristic representative of whether line voltage from the electrical power lines is present on the first and second feeder lines. As amended, the voltage sense circuit further includes an isolation mechanism. The isolation mechanism isolates the processing circuit from the first and second feeder lines.

The processing circuit is operably connected to the voltage sense circuit to receive the voltage detection signal. The processing circuit is operable to selectively generate a tamper flag based on whether the characteristic of the voltage detection signal indicates the presence of voltage on the first and second feeder lines when the service disconnect switch has disconnected

the electrical power lines from the first and second feeder lines.

B. Loy

Loy is directed to a tamper detection device for a meter. Loy includes a voltage sensing circuit 110 coupled to the load side of the power lines as shown in Fig. 2. The voltage sensing circuit 110 is shown in further detail in Fig. 3. As shown in Fig. 3, the voltage sensing circuit is directly connected to the load side of the power lines through a resistive divider having a protective zener diode 170, 172.

C. Loy Does Not Teach an Isolation Device as Claimed

Loy does not teach a voltage sense circuit that includes an isolation mechanism that isolates the processing circuit from the first and second feeder lines. As plainly shown in Figs. 2 and 3 of Loy, the feeder lines of Loy are *not* isolated from the microprocessor 102. The feeder lines are connected to the microprocessor through resistors. Accordingly, Loy does not teach or suggest an isolation mechanism as claimed in claim 1 as amended.

In the October 7, 2004 office action, the Examiner rejected claim 9, which contained a substantially similar isolation mechanism limitation. (Office action at p.4). In particular, the Examiner alleged that the zener diodes 170 and 172 of Loy constituted the claimed isolation mechanism. (*Id.*) Applicants respectfully disagree that the zener diodes 170 and 172 are configured to isolate the microprocessor from the first and second feeder lines. The zener diodes as arranged in Loy provide no electrical isolation, but rather mere overvoltage protection. As clearly shown in Fig. 3 of Loy, the zener diodes 170 and 172 do *not* provide electrical isolation between the microprocessor 102 and the load lines.

Accordingly, because Loy fails to teach or suggest an isolation mechanism in the voltage sense circuit as claimed, Loy fails to teach each and every element of claim 1 as amended. For at least this reason, that Loy does not anticipate claim 1 as amended.

IV. Claims 2-5 and 7-9

Claims 2-5 and 7-9 also stand rejected as allegedly being anticipated by Loy. Claims 2-5 and 7-9 depend from and incorporate all of the limitations of claim 1. Accordingly, for at least the same reasons as those set forth above in connection with claim 1, it is respectfully submitted that the rejection of claims 2-5 and 7-9 over Loy should be withdrawn.

V. Claim 11

Claim 11 also stands rejected as allegedly being anticipated by Loy. Claim 11, like claim 1, recites an isolation mechanism in a voltage sense circuit. As discussed above, Loy fails to disclose a voltage sense circuit that includes an isolation mechanism as claimed. The zener diodes of Loy provide overvoltage protection, but do not isolate the microprocessor 102 of Loy.

Because Loy does not disclose or suggest an isolation mechanism as claimed, Loy does not disclose or suggest each and every element of claim 11. As a consequence, it is respectfully submitted that the anticipation rejection of claim 11 is in error and should be withdrawn.

VI. Claims 12-14

Claims 12-14 also stand rejected as allegedly being anticipated by Loy. Claims 12-14 depend from and incorporate all of the limitations of claim 11. Accordingly, for at least the same reasons as those set forth above in connection with claim 11, it is respectfully submitted that the

rejection of claims 12-14 over Loy should be withdrawn.

#### VII. Claims 17-20

Unlike claim 1 and 11, claims 17-20 stand rejected as allegedly being obvious over Dennon. Unlike claims 1 and 11, claims 17-20 as filed included a limitation directed to a voltage sense circuit that is operably connected to the at least one *power* line to generate a voltage detection signal. By contrast, claims 1 and 11 both include a limitation directed to a voltage sense circuit coupled to a feeder or load line, not the power line. Claim 17 has been amended to recite that the voltage sense circuit is coupled to the feeder (load) line, which is consistent with claims 1 and 11.

Dennon does not disclose or suggest a voltage sense circuit coupled to a load line (as opposed to a power line) to detect a voltage thereon. Accordingly, it is respectfully submitted that the obviousness rejection of claim 17 over Dennon should be withdrawn.

Claims 18-20 also stand rejected as allegedly being obvious over Dennon. Claims 18-20 depend from and incorporate all of the limitations of claim 17. Accordingly, for at least the same reasons as those set forth above in connection with claim 17, it is respectfully submitted that the rejection of claims 18-20 over Dennon should be withdrawn.

#### VIII. New Claim 21

New claim 21 depends from and incorporates all of the limitations of claim 1. Accordingly, claim 21 is patentable for at least the same reasons as those set forth above in connection with claim 1.

IX. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicants have made a patentable contribution to the art. Favorable reconsideration and allowance of this application is, therefore, respectfully requested.

Respectfully Submitted,

MAGINOT, MOORE & BECK

A handwritten signature in black ink, appearing to read 'H. C. Moore', written over the printed name.

January 7, 2005

Harold C. Moore  
Registration No. 37,892  
Bank One Center/Tower  
111 Monument Circle, Suite 3000  
Indianapolis, Indiana 46204-5115

Enclosures